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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,358	11/14/2003	Kentaro Takakura	10873.1344US01	3325

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EXAMINER

BLOOM, NATHAN J

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/714,358	TAKAKURA ET AL.	
	Examiner	Art Unit	
	Nathan Bloom	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 4-18 and 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02/17/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 4-18 and 20-29 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse (A reply without traverse has been made since no statement of traverse has been made in written response of election/restriction requirement. MPEP § 818.03(a) and (b)) in the reply filed on 03/30/2007.
2. Applicant's election without traverse of election of species requirement in the reply filed on 3/30/2007 is acknowledged.
3. This application contains claim 4-18 and 20-29 drawn to an invention nonelected with traverse in Paper No. 10/714358. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 and 19 rejected under 35 U.S.C. 102(b) as being anticipated by Hirano et al (PCT WO99/44368, Note: Used English language equivalent US 6961474 for rejection.).

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Instant claim 1: An encoding device performing run-length encoding and variable-length encoding, comprising:

an input portion for sequentially inputting one block of m by n data [*Fig. 2-3 and 9(b) block of m by n data, Fig. 13 input goes into memory bank, lines 14-34 of column 20*];

a comparing and determining portion for determining for each individual data unit input by the input portion whether its value is 0 (zero) [*203 of Fig. 13 determines zero portion, lines 35-47 of column 20*];

an information register for storing determination result information on the results of the determination by the comparing and determining portion [*204a-b of Fig. 13 lines 35-47 of column 20*];

a data buffer for storing data input by the input portion [*201 of Fig. 13, lines 13-29 of column 20*];

a read control portion for controlling reading of the data from the data buffer in such a manner that only input data having a value that is not 0 (zero) are read out based on the determination result information stored in the information register [*204a-b and 205 of Fig. 13 and Fig. 14 a-b, lines 35-63 of column 20*];

a run-length encoding portion for performing run-length encoding using data read from the data buffer and the determination result information stored in the information register [*Kenji discloses putting data directly into variable length encoder (203 of Fig. 13), but it was known to one of ordinary skill in the art to perform run length encoding on the data before performing VLE as evidenced by Fig. 1 of Tayama (US 5694127)*]; and

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a variable-length encoding portion for performing variable-length encoding using as a data pair the input data and the number of consecutive data having a value of 0 (zero) that is obtained by the run-length encoding portion [206 of Figure 13, lines 48-63 of column 20].

Instant claim 2: The encoding device according to claim 1, wherein the determination result information is stored in the information register in a zig-zag scan order with respect to the arrangement of the data in the block [Fig. 9b, lines 13-42. *The use of a zig-zag scan order for DCT coefficients was known to one of ordinary skill in the art at the time of the invention.*].

Instant claim 3: The encoding device according to claim 1, further comprising: a write control portion for controlling writing of the data to the data buffer; wherein the write control portion permits writing to the data buffer only if the comparing and determining portion has determined that the value of the data is not 0 (zero) [203 of Fig. 13 *only writes input data to the buffer (204 a and b) if it is non-zero input data.*].

Instant claim 19 is the method performed by the apparatus as described in instant claim 3 and as such has been disclosed per Kenji in the figures and description as discussed in the rejection of instant claim 3.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tayama (US 5694127): Combination of RLE and VLE in series disclosed in Fig. 1.

Contact Information

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Bloom whose telephone number is 571-272-9321. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu, can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nathan Bloom



JINGGE WU
SUPERVISORY PATENT EXAMINER